PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
DOCKET NO. 2005-001-E
DIRECT TESTIMONY OF PROGRESS ENERGY CAROLINAS, INC.

WITNESS BRUCE P. BARKLEY

Q. Please state your name, address, and position.

A. My name is Bruce P. Barkley and my business address is 410 S. Wilmington Street, Raleigh, North Carolina. My position is Manager– Regulatory Accounting for Progress Energy Service Company ("Progress Energy") which is an affiliate of Progress Energy Carolinas, Inc. ("PEC")

Q. Please describe your educational background and professional experience.

A. I obtained a Bachelor of Science Degree in Business Administration with a concentration in Accounting from the University of North Carolina at Chapel Hill in 1984 and an MBA Degree from Wake Forest University in 1999. I obtained my CPA license in 1987. I joined Progress Energy in the Regulatory Services Section in May 2001 and I am responsible for regulatory accounting and reporting. Prior to joining Progress Energy, I held various positions with Public Service Company of North Carolina, Inc., from 1988 to 2001 where I was responsible for regulatory filings and reports submitted to the North Carolina Utilities Commission.

Q. Have you previously presented testimony to any regulatory agencies regarding fuel clauses?

A. Yes, I have. I appeared before the South Carolina Public Service Commission in Docket Numbers 2003-1-E and 2004-1-E. I have also appeared before the NCUC in Docket Numbers E-2, Sub 806, Sub 833 and Sub 851.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to review the Company's fuel cost and revenue collection for the period January 2004 through March 2005, present projected fuel cost for the period April 2005 through June 2006 and recommend a fuel factor to be effective July 1, 2005. My Exhibits 1 and 2 reflect actual information for the January 2004 through March 2005 review period. My Exhibits 3 and 4 address the projected period ending June 2006.

Q. Please explain Barkley Exhibit No. 1.

A. Barkley Exhibit No. 1 is a summary of PEC's actual system fuel cost and kilowatt-hour sales experienced during the period January 2004 through March 2005. Lines 1-9 provide a breakdown of fossil fuel expense by type of generation resource - coal, oil, or gas - and indicate the type of generating unit which consumed the fuel. Emission allowance expense is shown on line 10 and nuclear fuel expense on line 11. Lines 12 and 13 show purchased power costs and the fuel portion off-system sales, respectively. Line 16 indicates the system average cost of fuel per kilowatt-hour sold each month.

Q. How did the fuel revenue billings compare to the actual fuel costs incurred during the historical period January 2004 through March 2005?

A. Barkley Exhibit No. 2 is a monthly comparison of the revenues billed South Carolina retail customers through the base fuel component of the approved rates to the actual fuel costs attributable to those sales. Lines 6 and 14 represent the differences between the monthly jurisdictional fuel cost and the corresponding revenue billed under the fuel factor approved by the Commission. Lines 8 and 16

represent the cumulative under-recovery of fuel expense. During 2004 and the first quarter of 2005, PEC's under-recovery increased from $5.1 million to $30 million.

Q. Please discuss the under-collections shown on Exhibit No. 2.

A. Significant under-collections began in May 2004. During that month, PEC under-collected its fuel costs by $6.6 million due to record-setting hot weather and outages at two of its nuclear units as explained in Mr. Hinnant's testimony. The sales listed on Line 1 do not completely reflect the weather because much of the electricity generated and consumed in May was billed to customers in June due to cycle billing. The remainder of the large under-collections occurred during the peak winter and summer months where the rising costs of coal and natural gas are accentuated. The under-collection of $2.9 million in March was attributable to colder than normal weather, rising fossil fuel costs and the Brunswick nuclear plant refueling outage. Nuclear performance is discussed by Mr. Hinnant and coal and natural gas prices and usage are explained in Mr. Coats' testimony.

Q. Please explain Barkley Exhibit No. 3.

A. Barkley Exhibit No. 3 presents a base fuel component of 2.791 ¢/kWh for the 12-month period July 2005 through June 2006, consisting of a component for recovery of projected fuel expense for this period and a component to collect the projected under-recovery at June 2005. I am projecting the eligible under-recovery to be $41.5 million at June 2005.

Q. Please explain Barkley Exhibit No. 4.

A. Barkley Exhibit No. 4 is a continuation of my Exhibit No. 2 showing projected

costs and revenues, by month, for the period April 2005 through June 2006. The projection assumes scheduled maintenance and refueling outages for certain of PEC's nuclear generating units based on the latest plan and includes forced outage rates for fossil units based upon historical outage data. The exhibit continues the use of the current base fuel component of 1.471¢/kWh through June 2005 and shows a fuel factor of 2.791 for the period July 2005 through June 2006.

Q. What fuel factor are you recommending for adoption in this proceeding?

A. PEC is asking the Commission to approve a fuel factor of 2.791 ¢/kWh to be effective for the 12-month period July 2005 through June 2006.

Q. Does that conclude your testimony?

A. Yes, it does.

PROGRESS ENERGY CAROLINAS, INC.

SYSTEM FUEL COST
SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2005-1-E
SIX MONTHS ENDED JUNE 2004

		2004 JANUARY	2004 FEBRUARY	2004 MARCH	2004 APRIL	2004 MAY	2004 JUNE
	FOSSIL STEAM						
1	COAL	$ 54,826,102.50	$ 54,214,057.30	$ 50,904,645.74	$ 42,277,419.28	$ 56,288,993.91	$ 50,898,268.10
2	OIL	$ 409,529.76	$ 270,989.30	$ 234,610.54	$ 329,440.72	$ 449,733.70	$ 535,978.60
3	NATURAL GAS		$ -	$ -			$ 542,814.30
4	TOTAL FOSSIL STEAM	$ 55,235,632.26	$ 54,485,046.60	$ 51,139,256.28	$ 42,606,860.00	$ 56,738,727.61	$ 51,977,061.00
	I. C. TURBINES						
5	OIL	$ 1,098,081.81	$ (154,545.23)	$ 182,387.29	$ 258,826.84	$ 715,119.05	$ 176,159.85
6	NATURAL GAS	$ 12,363,039.57	$ 7,944,536.18	$ 2,153,400.20	$ 2,860,153.05	$ 26,320,176.11	$ 12,797,061.75
7	PROPANE GAS	$ -	$ -	$ -	$ -	$ -	$ -
8	TOTAL I. C. TURBINES	$ 13,461,121.38	$ 7,789,990.95	$ 2,335,787.49	$ 3,118,979.89	$ 27,035,295.16	$ 12,973,221.60
9	TOTAL FOSSIL FUEL	$ 68,696,753.64	$ 62,275,037.55	$ 53,475,043.77	$ 45,725,839.89	$ 83,774,022.77	$ 64,950,282.60
10	EMISSION ALLOWANCES	$ 529,923.35	$ 539,363.30	$ 525,998.40	$ 670,954.14	$ 834,131.78	$ 213,288.10
11	NUCLEAR FUEL	$ 10,003,331.62	$ 9,201,722.97	$ 7,140,169.64	$ 8,297,667.35	$ 6,432,697.94	$ 9,250,297.56
12	PURCHASED POWER	$ 8,556,226.98	$ 6,380,374.82	$ 8,350,026.51	$ 7,332,636.06	$ 21,450,276.88	$ 12,321,896.52
13	OFF-SYSTEM SALES	$ (16,895,217.43)	$ (15,792,461.11)	$ (10,147,415.89)	$ (10,875,147.27)	$ (9,602,590.41)	$ (9,990,851.11)
14	**TOTAL FUEL COST**	$ 70,891,018.16	$ 62,604,037.53	$ 59,343,822.43	$ 51,151,950.17	$ 102,888,538.96	$ 76,744,913.67
15	TOTAL KWH SALES	4,530,204,500	4,578,139,300	4,185,739,500	3,848,207,000	3,788,221,700	4,658,707,300
16	**COST PER KWH**	$ 0.01565	$ 0.01367	$ 0.01418	$ 0.01329	$ 0.02716	$ 0.01647

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PROGRESS ENERGY CAROLINAS, INC.

SYSTEM FUEL COST
SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2005-1-E
SIX MONTHS ENDED DECEMBER 2004

		2004 JULY	2004 AUGUST	2004 SEPTEMBER	2004 OCTOBER	2004 NOVEMBER	2004 DECEMBER
	FOSSIL STEAM						
1	COAL	$ 57,315,362.86	$ 61,712,537.45	$ 44,411,732.15	$ 44,453,510.72	$ 46,805,344.50	$ 55,647,057.90
2	OIL	$ 349,588.11	$ 328,478.07	$ 337,815.65	$ 407,645.79	$ 543,815.62	$ 577,321.70
3	NATURAL GAS	$ 555,705.76	$ 642,045.06	$ 277,578.41	$ (59,603.88)		
4	TOTAL STEAM ELECTRIC	$ 58,220,656.73	$ 62,683,060.58	$ 45,027,126.21	$ 44,801,552.63	$ 47,349,160.12	$ 56,224,379.60
	I. C. TURBINES						
5	OIL	$ 129,464.76	$ 124,345.57	$ 259,588.30	$ 85,418.42	$ 166,164.24	$ 1,444,382.21
6	NATURAL GAS	$ 21,179,353.34	$ 19,640,750.03	$ 12,654,468.85	$ 2,735,032.92	$ 3,625,773.50	$ 11,646,377.96
7	PROPANE GAS	$ -	$ -	$ -	$ -	$ -	$ -
8	TOTAL I. C. TURBINES	$ 21,308,818.10	$ 19,765,095.60	$ 12,914,057.15	$ 2,820,451.34	$ 3,791,937.74	$ 13,090,760.17
9	TOTAL FOSSIL FUEL	$ 79,529,474.83	$ 82,448,156.18	$ 57,941,183.36	$ 47,622,003.97	$ 51,141,097.86	$ 69,315,139.77
10	EMISSION ALLOWANCES	$ 532,677.10	$ 469,231.78	$ 296,179.50	$ 394,534.91	$ 371,966.44	$ 2,029,558.20
11	NUCLEAR FUEL	$ 9,411,550.17	$ 9,208,408.47	$ 9,563,322.60	$ 8,352,901.04	$ 8,014,964.62	$ 9,665,709.18
12	PURCHASED POWER	$ 17,456,462.72	$ 12,912,374.94	$ 11,895,668.79	$ 7,834,641.61	$ 8,658,643.92	$ 11,422,890.73
13	OFF-SYSTEM SALES	$ (12,253,764.65)	$ (10,552,810.30)	$ (2,917,436.55)	$ (9,107,258.10)	$ (7,532,548.61)	$ (14,590,252.55)
14	**TOTAL FUEL COST**	$ 94,676,400.17	$ 94,485,361.07	$ 76,778,917.70	$ 55,096,823.43	$ 60,654,124.23	$ 77,843,045.33
15	TOTAL KWH SALES	4,912,347,500	4,826,877,000	4,575,050,600	3,917,029,600	3,717,156,100	4,286,650,200
16	**COST PER KWH**	$ 0.01927	$ 0.01957	$ 0.01678	$ 0.01407	$ 0.01632	$ 0.01816

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PROGRESS ENERGY CAROLINAS, INC.

SYSTEM FUEL COST
SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2005-1-E
THREE MONTHS ENDING MARCH 2005

		2005 JANUARY	2005 FEBRUARY	2005 MARCH
	FOSSIL STEAM			
1	COAL	$ 67,960,690.14	$ 61,333,388.11	$ 68,841,632.47
2	OIL	$ 525,422.33	$ 285,798.18	$ 326,114.86
3	NATURAL GAS		$ -	$ -
4	TOTAL FOSSIL STEAM	$ 68,486,112.47	$ 61,619,186.29	$ 69,167,747.33
	I. C. TURBINES			
5	OIL	$ 1,996,378.58	$ 265,036.52	$ 763,716.97
6	NATURAL GAS	$ 14,555,461.41	$ 5,810,449.96	$ 15,662,450.89
7	PROPANE GAS	$ -	$ -	$ -
8	TOTAL I. C. TURBINES	$ 16,551,839.99	$ 6,075,486.48	$ 16,426,167.86
9	TOTAL FOSSIL FUEL	$ 85,037,952.46	$ 67,694,672.77	$ 85,593,915.19
10	EMISSION ALLOWANCES	$ 948,112.44	$ 1,994,071.54	$ 2,814,283.92
11	NUCLEAR FUEL	$ 9,712,533.10	$ 8,571,137.80	$ 7,623,023.34
12	PURCHASED POWER	$ 12,081,731.82	$ 7,724,459.97	$ 10,690,934.15
13	OFF-SYSTEM SALES	$ (17,427,353.63)	$ (12,928,044.96)	$ (20,373,134.23)
14	**TOTAL FUEL COST**	$ 90,352,976.19	$ 73,056,297.12	$ 86,349,022.37
15	TOTAL KWH SALES	4,550,908,200	4,522,714,100	4,317,282,100
16	**COST PER KWH**	$ 0.01985	$ 0.01615	$ 0.02000

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PROGRESS ENERGY CAROLINAS, INC.

SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2005-1-E

COMPARISION OF ACTUAL FUEL REVENUES AND EXPENSES
January 2004 - March 2005

		2004 JANUARY	2004 FEBRUARY	2004 MARCH	2004 APRIL	2004 MAY	2004 JUNE	2004 JULY	2004 AUGUST
1	ACTUAL SC RETAIL SALES (KWH)	630,892,125	626,546,693	601,056,441	553,395,893	532,228,726	685,898,072	700,845,232	668,186,495
2	ACTUAL FUEL COST	$ 0.01565	0.01367	0.01418	0.01329	0.02716	0.01647	0.01927	0.01957
3	FUEL BASE	$ 0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471
4	REVENUE REQUIRED	$ 9,873,462	8,564,893	8,522,980	7,354,631	14,455,331	11,296,741	13,505,289	13,076,411
5	REVENUE BILLED	$ 9,280,423	9,216,502	8,841,540	8,140,454	7,829,085	10,089,561	10,309,433	9,829,023
6	OVER (UNDER) RECOVERY	$ (593,039)	651,609	318,560	785,823	(6,626,247)	(1,207,181)	(3,195,855)	(3,247,387)
7	2004 SC Law Change	$ -	0	(948,472)	0	0	0	0	0
8	CUMULATIVE RECOVERY	$ (5,683,454)	(5,031,845)	(5,661,757)	(4,875,934)	(11,502,181)	(12,709,362)	(15,905,217)	(19,152,604)

		2004 SEPTEMBER	2004 OCTOBER	2004 NOVEMBER	2004 DECEMBER	2005 JANUARY	2005 FEBRUARY	2005 MARCH
9	ACTUAL SC RETAIL SALES (KWH)	659,502,230	570,907,426	511,510,794	596,408,640	616,099,915	606,933,897	557,383,936
10	ACTUAL FUEL COST	$ 0.01678	0.01407	0.01632	0.01816	0.01985	0.01615	0.02000
11	FUEL BASE	$ 0.01471	0.01471	0.01471	0.01471	0.01471	0.01471	0.01471
12	REVENUE REQUIRED	$ 11,066,447	8,032,667	8,347,856	10,830,781	12,229,583	9,801,983	11,147,679
13	REVENUE BILLED	$ 9,701,278	8,398,048	7,524,324	8,773,171	9,062,830	8,927,998	8,199,118
14	OVER (UNDER) RECOVERY	$ (1,365,169)	365,381	(823,532)	(2,057,610)	(3,166,753)	(873,985)	(2,948,561)
15	ACCOUNTING ADJUSTMENT	$ -	0	0	(18,500)	0	0	0
16	CUMULATIVE RECOVERY	$ (20,517,773)	(20,152,392)	(20,975,924)	(23,052,034)	(26,218,787)	(27,092,772)	(30,041,333)

Barkley Exhibit No. 2
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Barkley Exhibit No. 3
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PROGRESS ENERGY CAROLINAS, INC.

SOUTH CAROLINA RETAIL FUEL CASE
CALCULATION OF BASE FUEL COMPONENT
April 2005

1. Projected Fuel Expense from July 2005 through June 2006

Cost of Fuel	$1,220,730,000	
System Sales	54,546,281	Mwhs
Average Cost Per KWH	2.238	cents

2. Revenue Difference To be Collected from July 2005 through June 2006.

Under-Recovery at June 2005	$41,483,716	
Projected S.C. Retail Sales	7,499,215	Mwhs
Average Cost Per KWH	0.553	cents

3. Base Fuel Cost Per KWH - Projected Period

Average Fuel Cost	2.238	cents
Revenue Difference	0.553	cents
Base Fuel Component	2.791	cents

PROGRESS ENERGY CAROLINAS, INC.

SOUTH CAROLINA RETAIL FUEL CASE - Docket No. 2005-1-E

COMPARISION OF PROJECTED FUEL REVENUES AND EXPENSES

		2005 APRIL	2005 MAY	2005 JUNE	2005 JULY	2005 AUGUST	2005 SEPTEMBER	2005 OCTOBER	2005 NOVEMBER	2005 DECEMBER
1	ESTIMATED SC RETAIL SALES (KWH)	551,670,000	562,084,000	646,361,000	696,149,000	723,034,000	687,466,000	586,034,000	531,172,000	603,741,000
2	ESTIMATED FUEL COST	$ 0.01894	0.02075	0.02355	0.02782	0.02501	0.02129	0.02237	0.02023	0.02166
3	FUEL BASE	$ 0.01471	0.01471	0.01471	0.02791	0.02791	0.02791	0.02791	0.02791	0.02791
4	REVENUE REQUIRED	$ 10,448,630	11,663,243	15,221,802	19,366,865	18,083,080	14,636,151	13,109,581	10,745,610	13,077,030
5	REVENUE BILLED	$ 8,115,066	8,268,256	9,507,970	19,429,519	20,179,879	19,187,176	16,356,209	14,825,011	16,850,411
6	OVER (UNDER) RECOVERY	$ (2,333,564)	(3,394,987)	(5,713,832)	62,654	2,096,799	4,551,025	3,246,628	4,079,401	3,773,381
7	CUMULATIVE RECOVERY	$ (32,374,897)	(35,769,884)	(41,483,716)	(41,421,062)	(39,324,263)	(34,773,238)	(31,526,610)	(27,447,209)	(23,673,828)

		2006 JANUARY	2006 FEBRUARY	2006 MARCH	2006 APRIL	2006 MAY	2006 JUNE
1	ESTIMATED SC RETAIL SALES (KWH)	680,941,000	623,635,000	581,080,000	559,565,000	570,236,000	656,162,000
2	ESTIMATED FUEL COST	$ 0.02005	0.02096	0.02146	0.01976	0.02252	0.02400
3	FUEL BASE	$ 0.02791	0.02791	0.02791	0.02791	0.02791	0.02791
4	REVENUE REQUIRED	$ 13,652,867	13,071,390	12,469,977	11,057,004	12,841,715	15,747,888
5	REVENUE BILLED	$ 19,005,063	17,405,653	16,217,943	15,617,459	15,915,287	18,313,481
6	OVER (UNDER) RECOVERY	$ 5,352,196	4,334,263	3,747,966	4,560,455	3,073,572	2,565,593
7	CUMULATIVE RECOVERY	$ (18,321,632)	(13,987,369)	(10,239,403)	(5,678,948)	(2,605,376)	(39,783)

Barkley Exhibit No. 4
Docket No. 2005-1-E